

### 5.3 DAR Handling Functional Interface Requirements

ASTER-0110 ECS shall have the capability to send and ASTER GDS shall have the capability to receive DARs for the ASTER instrument. DARs shall contain the following information, at a minimum:

- a. Observation number
- b. Experimenter identification
- c. Experimenter address
- d. Investigation identification
- e. Scientific discipline
- f. Observation repetition period
- g. Tolerance in observation time
- h. User priority
- i. Scheduling priority and target of opportunity flag
- j. Descriptive text
- k. Location data expressed in terms of longitude and latitude as earliest start coordinates and latest stop coordinates
- l. Earliest start time
- m. Latest stop time
- n. Minimum coverage required
- o. Maximum coverage desired
- ~~p. Number of instruments involved in the investigation.~~
- ~~q. Which instruments are involved in the investigation~~
- r. Associated product generation request and product distribution request.
- s. Pointing angle
- t. Calibration requirements
- u. Coordination requirements
- v. Data transmission requirements

- w. Illumination requirements (day/night)
- x. Specific time of observation
- y. Sun angle
- z. Direct downlink option

ASTER-0120 ASTER GDS shall have the capability to send and ECS shall have the capability to receive DAR status, when requested by ECS. [Issue 9] DAR status shall include such information as confirmation or rejection of the DAR, and notification of DAR scheduling and completion, to include at a minimum:

- a. Date and time
- b. Instrument ID
- c. DAR ID
- d. Request status
- e. Implementation schedule
- f. If rejection, then the reason for the rejection.

ASTER-0130 ECS shall have the capability to send and ASTER GDS shall have the capability to receive queries for the current status of ASTER DARs which were previously submitted to the ASTER GDS by ECS.

ASTER-0140 ECS shall have the capability to send and ASTER GDS shall have the capability to receive changes to DARS for the ASTER instrument.

## 5.4 Planning & Scheduling/Command Load Functional Interface Requirements

ASTER-0200 ECS shall have the capability to send and ASTER GDS shall have the capability to receive planning aids (e.g., predicted orbit data, and spacecraft maneuver information).

ASTER-0210 ASTER GDS shall have the capability to send and ECS shall have the capability to receive ASTER instrument resource profiles and instrument resource deviation lists (when a resource profile exists)<sup>1</sup>.

<sup>1</sup>ASTER Short-Term Schedules (STS) shall be delivered to the EOC in "Instrument Resource Profile" or "Instrument Resource Deviation List" format.

ASTER-0220      ECS shall have the capability to send and ASTER GDS shall have the capability to receive a notification when ASTER instrument resource